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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/072,728

02/07/2002

Chester L. Schuler

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10/20/2003

COOLEY GODWARD LLP

ATTN: PATENT GROUP

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EXAMINER

LIU, MING HUN

ART UNIT

PAPER NUMBER

2697

DATE MAILED: 10/20/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,728

Applicant(s)

SCHULER ET AL.

Examiner

Ming-Hun Liu

Art Unit

2697

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 10, line 10, the reference to fig. 1, is incorrect as there is no track ball in figure 1. It is suggested to replace fig.1 with fig. 7 in the specifications.

Appropriate correction is required.

Drawings

2. The drawings are objected to because on page 21, the specifications refer to a servo motor 512, an encoder 514 and a drive/position assembly in figure 9, all of which are absent from the figures. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Furthermore on page 23, the element 516'' is also missing from figure 10A.

Claim Objections

3. Claim 19 objected to because on line 7 of the claim, the term 'the motor' has insufficient antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 19-22, 25-27 and 30-32 are rejected under 35 U.S.C. 102(b) as being unpatentable by US Patent 3,919,691 to Noll.

In reference to claim 19, it can be seen from figure 2 that Noll teaches a movable member with an actuator coupled to the member. The actuator outputs a haptic feedback force (column 4, lines 13-14) and includes a data storage component to store torque data associated with the feedback (column 4, lines 42-45) where the torque data is provided by a computer. Noll also teaches a sensor coupled (item 11) to the moveable member that sends position information. A controller is connected to the data storage (figure 3, item 34) and actuator and computer to send computer derived signals to the actuators to control the haptic feedback (column 4, lines 42-49 and column 5, lines 41-44).

Referring to claim 20, Noll discloses the inclusion of two actuators that contribute to the haptic feedback (column 4, lines 13-14; figures 1 and 2).

In reference to claim 20, Noll teaches that the data storage component receives and stores a plurality of torque values from the computer (column 4, lines 42-49).

In reference to claim 21, Noll explains that the torque values are associated with different tactile sensations (column 4, lines 10-17).

As to claim 22, Noll teaches that each torque value is associated with a different tactile sensation (column 4, lines 44-61).

Claim 25 is rejected on grounds similar to the rejection of claim 19.

In reference to Claim 26, Noll teaches that the moveable member is a knob (column 5, line 31 and lines 44-47)

Claim 27 is rejected on grounds presented in to the rejection of claim 19 and column 5, lines 5-29 of the Noll's disclosure.

Claims 31 and 33 are rejected on grounds similar to the rejection of claim 19.

Claim 32 is rejected on grounds similar to the rejection of claim 22.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 23, 24, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noll.

There is no disclosed criticality as to why the data storage component should be located within or on the exterior of the controller. One skilled in the art understands that positioning of these two components is a design criterion that is easily modified during fabrication. Depending on the resources available it may be more advantageous (cost and fabrication) to integrate or disengage the two components.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 4,868,549 to Affinito et al: Feedback mouse, two actuators

US Patent 4,560,983 to Williams: Knob, rotation with feedback.

US Patent 4,477,043 to Repperger: Knob with feedback control.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ming-Hun Liu whose telephone number is 703-305-8488. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on 703-305-3885. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Ming-Hun Liu



JOSEPH MANCUSO
PRIMARY EXAMINER